## State of California AIR RESOURCES BOARD

## Small Off Road Engine Evaporative Emission System Components

Q-08-025 Solvay Advanced Polymers, LLC Innovative Product

WHEREAS, Pursuant to California Health and Safety Code, sections 39600, 39601 and 43013, the California Air Resources Board (ARB) has established a certification process for evaporative emission system components designed to control gasoline emissions from small off-road engines, as described in title 13, California Code of Regulations (13 CCR), section 2767.1;

WHEREAS, Pursuant to California Health and Safety Code, section 43013, ARB has established criteria and test procedures for determining the compliance of evaporative emission system components with the design requirements in 13 CCR, section 2754;

WHEREAS, Pursuant to 13 CCR, section 2767.1, ARB Executive Officer may issue an Executive Order if he determines that the small off-road engine evaporative emission system component or innovative product conforms to the applicable performance requirements set forth in 13 CCR, section 2754 and 2755;

WHEREAS, Pursuant to Health and Safety Code, sections 39515 and 39516, ARB Executive Officer issued Executive Order G-05-008 delegating to the Chief of ARB Monitoring and Laboratory Division (MLD) the authority to certify small off-road engine evaporative system components and innovative products; and

WHEREAS, On June 13, 2008, Solvay Advanced Polymers, LLC submitted an application for certification as an innovative product under 13 CCR, section 2767(c) for Ixef® BXT-2000 Polyarylamide (PARA) blow molded fuel tanks.

NOW, THEREFORE, I, William V. Loscutoff, Chief of MLD, find that fuel tanks using Solvay Advanced Polymers, LLC Ixef® BXT-2000 Polyarylamide (PARA) produced following the process and material specifications set out in Attachment A constitute an innovative fuel tank pursuant to 13 CCR, section 2767(c). Fuel tanks produced following Solvay Advanced Polymers, LLC process and material specifications are hereby deemed equivalent to those tanks listed in 13 CCR, section 2752(a)(5). This finding is based on Solvay Advanced Polymers, LLC demonstration that such tanks have a permeation rate substantially lower than 1.5 grams per square meter per day set forth in 13 CCR, section 2754, when tested at a constant temperature of 40° C pursuant to TP-901 using an approved test fuel of CE10.

IT IS ORDERED AND RESOLVED that no tank permeation data is required to be submitted in the certification process for equipment using the Solvay Advanced Polymers, LLC lxef® BXT-2000 Polyarylamide (PARA) blow molded fuel tank.

IT IS ORDERED AND RESOLVED that all fuel tanks made from Solvay Advanced Polymers, LLC Ixef® BXT-2000 Polyarylamide (PARA) with average barrier and wall thicknesses equal to or greater than the value listed in Table 1 attached hereto and incorporated herein, are certified for use in small off-road equipment.

## Table 1 Specifications for Solvay Advanced Polymers, LLC lxef® BXT-2000 Polyarylamide (PARA) Fuel Tanks

Min. average barrier thickness (mm)	Min. average overall tank thickness (mm)
0.05	1.5

IT IS FURTHER ORDERED that equipment manufacturers utilizing Solvay's Innovative Plastics Ixef® BXT-2000 Polyarylamide (PARA) resin for fuel tanks shall provide the warranty. The warranty must conform to the requirements of 13 CCR, section 2760.

IT IS FURTHER ORDERED that the certified Ixef® BXT-2000 Polyarylamide (PARA) blow molded tanks shall be installed in accordance with the manufacturer's installation and use instructions for the tank. A copy of this Executive Order, fuel tank installation, and use instructions shall be provided to manufacturers purchasing Solvay Advanced Polymers, LLC Ixef® BXT-2000 Polyarylamide (PARA) blow molded fuel tanks for installation on small off-road engines and equipment introduced into commerce in California.

IT IS FURTHER ORDERED that Solvay Advanced Polymers, LLC lxef® BXT-2000 Polyarylamide (PARA) blow molded fuel tanks shall be clearly identified by a permanent identification that allows ARB to identify manufacturer's name, executive order number, and model number.

IT IS FURTHER ORDERED that any modification of Solvay Advanced Polymers, LLC approved process and material specifications for producing a Ixef® BXT-2000 Polyarylamide (PARA) blow molded fuel tank are prohibited. Any alteration or modification of the process or material specifications set out in Attachment A of this Executive Order will require the manufacturer to apply for a new Executive Order.

IT IS FURTHER ORDERED that the Solvay Advanced Polymers, LLC Ixef® BXT-2000 Polyarylamide (PARA) blow molded fuel tank shall be compatible with fuels in common use in California at the time of certification and any modifications to comply with future California fuel requirements shall be approved in writing by the Executive Officer or Executive Officer's delegate.

IT IS FURTHER ORDERED that the innovative product certification of the Solvay Advanced Polymers, LLC Ixef® BXT-2000 Polyarylamide (PARA) blow molded fuel tank can be referenced in certification applications for small off-road engines and equipment that use small off-road engines unless the Executive Officer finds that the Solvay Advanced Polymers, LLC Ixef® BXT-2000 Polyarylamide (PARA) blow molded fuel tank no longer meet the performance requirements set forth in 13 CCR, section 2754 when tested pursuant to 13 CCR, section 2765.

Executed at Sacramento, California, this 3 day of Syntember 2008.

William V. Loscutoff, Chief

Monitoring and Laboratory Division